

Claims

- [c1] A communication server comprising:
- a message transfer unit adapted to transfer messages sent between a first user communicating under a first communication system and a second user communicating under a second communication system;
 - a translator connected to said message transfer unit, said translator being adapted to translate messages sent from said first communication system into a format compatible with said second communication system and translate messages sent from said second communication system into a format compatible with said first communication system; and
 - a voice-over-Internet-protocol (VoIP) unit connected to said message transfer unit, wherein said messages comprise voice messages transmitted through said communication server in a VoIP format.
- [c2] The communication server in claim 1, further comprising a voice/data converter adapted to convert voice messages into data messages and data messages into voice messages, such that a voice user in said first communication system may transparently communicate with a

data user in said second communication system through said communication server.

[c3] The communication server in claim 1, further comprising an instant message unit adapted to allow instant messaging between said first communication system and said second communication system.

[c4] The communication server in claim 1, wherein said message transfer unit is adapted to transfer said messages between said first communication system and said second communication system using discrete Internet protocol addresses.

[c5] The communication server in claim 1, further comprising a registration unit adapted to associate users of incompatible communication systems with an incident.

[c6] The communication server in claim 1, wherein said first communication system and said second communication system may be incapable of communicating directly with each other.

[c7] The communication server in claim 1, wherein said first communication system and said second communication system may each comprise a plurality of mobile wireless transceivers and a plurality of land-based transceivers adapted to be used by emergency-response organiza-

tions.

- [c8] A communication server comprising:
a message transfer unit adapted to transfer messages between users operating under different communication systems, wherein said messages are transmitted through said communication server in an Internet protocol format;
a translator connected to said message transfer unit, said translator being adapted to translate messages sent to said message transfer unit into formats compatible with said communication systems; and
a registration unit adapted to associate users of communication systems with an incident, such that communications between said users is restricted by incident and by registration.
- [c9] The communication server in claim 8, further comprising a voice/data converter adapted to convert voice messages into data messages and data messages into voice messages, such that a voice user in a first communication system may transparently communicate with a data user in the same or a second communication system through said communication server.
- [c10] The communication server in claim 8, further comprising an instant message unit adapted to allow instant mes-

saging between said communication systems.

- [c11] The communication server in claim 8, wherein said message transfer unit is adapted to transfer said messages between said communication systems using discrete Internet protocol addresses.
- [c12] The communication server in claim 8, wherein said communication systems may each comprise a plurality of mobile wireless transceivers and a plurality of land-based transceivers adapted to be used by emergency-response organizations.
- [c13] The communication server in claim 8, wherein said messages comprise voice and data messages.
- [c14] The communication server in claim 8, wherein said message transfer unit is adapted to transfer said messages so as to provide real-time communication between users of said different communication systems.
- [c15] A communication server comprising:
 - a message transfer unit adapted to transfer messages between users operating under different communication systems, wherein said messages are transmitted through said communication server in an Internet protocol format;
 - a translator connected to said message transfer unit,

said translator being adapted to translate messages sent to said message transfer unit into formats compatible with said communication systems;

a registration unit adapted to associate communication systems with an incident, such that communications between said users is restricted by incident and by registration; and

a voice/data converter adapted to convert voice messages into data messages and data messages into voice messages, such that a voice user in a first communication system may transparently communicate with a data user in the same or a second communication system through said communication server.

[c16] The communication server in claim 15, further comprising an instant message unit adapted to allow instant messaging between said communication systems.

[c17] The communication server in claim 15, wherein said message transfer unit is adapted to transfer said messages between said communication systems using discrete Internet protocol addresses.

[c18] The communication server in claim 15, wherein said communication systems may each comprise a plurality of mobile wireless transceivers and a plurality of land-based transceivers adapted to be used by emergency-re-

sponse organizations.

- [c19] The communication server in claim 15, wherein said messages comprise voice and data messages.
- [c20] The communication server in claim 15, wherein said message transfer unit is adapted to transfer said messages so as to provide real-time communication between users of said different communication systems.
- [c21] A method of providing communications between different communication systems, said method comprising:
placing a first communication system and a second communication system in communication with a communication server, wherein said first communication system and said second communication system may be incapable of communicating directly with each other;
translating messages sent from said first communication system into a format compatible with said second communication system and translating messages sent from said second communication system into a format compatible with said first communication system, using said communication server; and
transmitting voice messages between said first communications system and said second communications system through said communication server in a voice-over-Internet-protocol (VoIP) format.

[c22] The method in claim 21, wherein said translating further comprises translating voice messages to data messages and translating data messages to voice messages, such that a voice user in said first communication system may transparently communicate with a data user in the same or said second communication system through said communication server.

[c23] The method in claim 21, wherein said transmitting includes sending instant messaging between said first communication system and said second communication system.

[c24] The method in claim 21, wherein said transmitting transfers said messages between said first communication system and said second communication system using discrete Internet protocol addresses.

[c25] The method in claim 21, wherein said first communication system and said second communication system may each comprise a plurality of mobile wireless transceivers and a plurality of land-based transceivers adapted to be used by emergency-response organizations.

[c26] The method in claim 21, wherein said messages comprise voice and data messages.

[c27] The method in claim 21, wherein said transmitting transfers said messages so as to provide real-time communication between users of said different incompatible communication systems.

[c28] A method of providing communications between different communication systems of different emergency response agencies, said method comprising:
identifying an incident;
associating at least one first communication system with said incident;
associating at least one second communication system with said incident;
placing said first communication system and said second communication system in communication with a communication server, wherein said first communication system and said second communication system may be incapable of communicating directly with each other;
translating messages sent from said first communication system into a format compatible with said second communication system and translating messages sent from said second communication system into a format compatible with said first communication system, using said communication server; and
restricting communications between said first communication system and said second communication system by

incident.

[c29] The method in claim 28, wherein said translating further comprises translating voice messages to data messages and translating data messages to voice messages, such that a voice user in said first communication system may transparently communicate with a data user in the same or said second communication system through said communication server.

[c30] The method in claim 28, wherein said transmitting includes sending instant messaging between said first communication system and said second communication system.

[c31] The method in claim 28, wherein said transmitting transfers said messages between said first communication system and said second communication system using discrete Internet protocol addresses.

[c32] The method in claim 28, wherein said first communication system and said second communication system may each comprise a plurality of mobile transceivers and a plurality of land-based transceivers adapted to be used by emergency-response organizations.

[c33] The method in claim 28, wherein said messages comprise voice and data messages.

[c34] The method in claim 28, wherein said transmitting transfers said messages so as to provide real-time communication between users of said different communication systems.

[c35] A method of providing communications between different incompatible communication systems, said method comprising:
connecting a first communication system and a second communication system to a communication server,
wherein said first communication system and said second communication system are incapable of communicating directly with each other; and
translating messages sent from said first communication system into a format compatible with said second communication system and translating messages sent from said second communication system into a format compatible with said first communication system, using said communication server;
wherein said translating further comprises translating voice messages to data messages and translating data messages to voice messages, such that a voice user in said first communication system may transparently communicate with a data user in the same or said second communication system through said communication server.

- [c36] The method in claim 35, wherein said transmitting includes sending instant messaging between said first communication system and said second communication system.
- [c37] The method in claim 35, wherein said transmitting transfers said messages between said first communication system and said second communication system using discrete Internet protocol addresses.
- [c38] The method in claim 35, wherein said first communication system and said second communication system each comprise a plurality of mobile transceivers and a plurality of land-based transceivers adapted to be used by emergency-response organizations.
- [c39] The method in claim 35, wherein said messages comprise voice and data messages.
- [c40] The method in claim 35, wherein said transmitting transfers said messages so as to provide real-time communication between users of said different incompatible communication systems.